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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/090,035	06/10/1998	MARTIN HAUPT	PHD97-074	3465

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EXAMINER

KUPSTAS, TOD A

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 04/08/2002

21

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/090,035	HAUPT ET AL.
	Examiner Tod Kupstas	Art Unit 2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 24 January 2002.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 3-19 is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 4) Interview Summary (PTO-413) Paper No(s) _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-6, 9, 11, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo (GB 2296811).

As set forth in claims 1 and 20, Shindo discloses a changer apparatus for information discs, comprising a stacking unit for stacking at least two information discs in respective stacking positions (elements 12), a read/write unit (17) for reading information stored on the information discs and/or writing information on the information discs in a play position, an eject position at which an information disc can be removed from the apparatus (access position 23) and, transport means for transport of the information discs from the eject position into a loading position along a curve-shaped loading path (see fig. 1), the loading position being a position for loading discs from the loading path of the transport means into the stacking positions of the stacking unit. Shindo does not disclose having the play position between the eject position and the loading position (it is unclear as to whether or not the tray 12 can rotate directly to the player or has to go through the

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loading position; see col. 6, lines 13-26, and page 7, line 22 col. 9, line 14. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the disk player of Shindo with a play position between the eject and loading position. The rationale is as follows: It would have been desirable to have immediately accessed the disk player without waiting for an intermediate position thereby saving time. One of ordinary skill would have been motivated by the desire to immediately access the disk player to reproduce disks to have provided the play position between the eject position and the loading position in the disk player of Shindo, thereby having provided an alternative arrangement to the current layout where one would merely switch the locations of the loading position and the disk player thereby providing immediate access to the disk player.

As set forth in claim 3, Shindo discloses a apparatus wherein the play position is offset from the direct connecting line between the loading position and the eject position (see fig. 1).

As set forth in claim 4, Shindo discloses a apparatus characterized wherein the play position is disposed on the loading path (see fig. 1, the loading path can be construed to mean from the disk player to the loading position).

As set forth in claim 5, Shindo discloses transport means further including a first transport mechanism for transporting the information discs between the eject position, the play position and the loading position, and a second transport mechanism for transport of the information discs into the stacking positions of the stacking unit, the first transport mechanism being adapted to move the information discs from the loading position in the loading plane and the second transport

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mechanism being adapted to move the information discs in a stacking direction oriented vertically with respect to the loading plane (pin 21 moves the stacking unit vertically).

As set forth in claim 6, Shindo discloses an apparatus wherein the first transport mechanism includes at least a first and a second guide for the disc edge of the information disc (tray mechanism), the first guide includes a groove (element 12 includes a groove along its arc) for supporting the disc moving along the loading path and the first guide is movable in the loading plane, the second guide includes at least one rotationally drivable transport wheel for driving the disc to move along the loading path (disc tray driver 30).

As set forth in claim 9, Shindo discloses a apparatus wherein the read/write unit is movably supported on a chassis plate of the apparatus (disc play apparatus 17).

As set forth in claim 11, Shindo discloses an apparatus characterized wherein the read/write unit is movable into the play position in the vertical direction (see fig. 4).

3. Claims 7, 8, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo (GB 2296811) in view of Umesaki (GB 0391424).

Shindo does not disclose the guide mechanism as claimed, however an analogous guide mechanism is employed, including a first passive guide and the third guide. In particular the usage of guide arms is not employed. As set forth in claims 7 and 12, it would have been obvious to have utilized arm guides for the transport of the disk. Umesaki discloses the usage of guide arms in the loading of the disk. It would have been obvious to one of ordinary skill in the art to have

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provided guide arms for the loading of disks, as taught by Umesaki, to the disk player as taught by Shindo. The rationale is as follows: It would have been desirable to have provided means for guiding the disk. As Umesaki teaches the desirability of using arms, one of ordinary skill would have been motivated by Umesaki's teaching to have provided arms to the disk player, as taught by Shindo, thereby having provided art equivalent means for guiding the disk into the reproduction and loading positions.

As set forth in claim 8, Shindo discloses an apparatus wherein the first and third guide are mounted on a common pivot (see fig. 1, the pivot of the structure).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo in view of Nakamichi et al (US 5,508,994).

As set forth in claim 10, Shindo discloses a changer apparatus characterized in that it has a read/write unit (17). Shindo does not explicitly disclose related clamps and dampers. As set forth in claim 10, Nakamichi et al disclose a changer apparatus characterized in that the read/write unit comprises a base plate and a laser mounting plate, the base plate and the laser mounting plate are coupled by means of dampers, the base plate is slidably mounted on the chassis plate, and the laser mounting plate carries a clamping device for clamping the information in the play position and an optical unit for reading information stored on the information disc; see col. 7, lines 28-54. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the disk player, as taught by Shindo, with the clamps and dampers, as taught by Nakamichi et al. The rationale is as follows: It would have been desirable to have

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provided means for reproducing the discs clearly. As Nakamichi et al teach the desirability of utilizing disk clamps and dampers, one of ordinary skill would have been motivated by Nakamichi et al's teaching to have provided the disk player, as taught by Shindo, with dampers and clamps, thereby having provided secure means for reproducing the disks. comprises a base plate and a laser mounting plate, the base plate and the laser mounting plate are coupled by means of dampers, the base plate is slidably mounted on the chassis plate, and the laser mounting plate carries a clamping device for clamping the information disc in the play position and an optical unit for reading information stored on the information disc.

5. Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo in view of Clarion (Japanese document 6-13193).

As set forth in claims 13-17, Shindo does not disclose spindles. As set forth in claim 13, Clarion discloses screwthreads (element 4 and 5) wherein the holder compartments are movable into a vertical direction by rotation of the spindles, there have been provided an upper stacking zone and a lower stacking zone of the stacking unit for stacking the holder compartment the loading position has been provided in a central zone between the upper and the lower stacking zone, one of the holder compartments is each time movable into the loading position by rotation of the spindles, and the transport means are adapted to move the information disc from the holder compartment, which is in the loading position, into the play position and into the eject position. As set forth in claim 14, Clarion discloses a changer apparatus wherein the axial direction of the spindles the central zone has spacing zones at both sides of the loading position, which spacing

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zones define an axial spacing between the holder compartment in its loading position and the axially adjacent holder compartments in their stacking positions; see fig. 5. As set forth in claim 15, Clarion discloses a changer apparatus wherein the average screwthread pitch of the spindles in the loading position is smaller than the average screwthread pitch in the upper and lower stacking zone; see fig. 5. As set forth in claim 16, Clarion discloses a changer apparatus wherein the screwthread pitch of the spindles in the loading position is essentially zero; see fig. 5. As set forth in claim 17, Clarion discloses a changer apparatus wherein the average screwthread pitch in the spacing zones is greater than the average screwthread pitch in the upper and the lower stacking zone; see fig. 5. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the spindle mechanism for vertical movement, as taught by Clarion, with the disk player, as taught by Shindo. The rationale is as follows: it would have been desirable to have provided accurate and efficient means for raising the disc storage position. As Clarion teaches the desirability of using the spindle mechanism, one of ordinary skill would have been motivated by Clarion's teaching to have provided the disc player, as taught by Shindo, with the spindle mechanism, thereby having provided an efficient art alternative method of raising and manipulating the disk storage area.

Official notice is taken regarding claim 18, with regards to having a lower and an upper guide pin for guiding the information discs into the holder compartments of the stacking unit, which guide pins are engageable into the center holes of the information discs from above and from below respectively. It would have been obvious to a person of ordinary skill in the art at the

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time this invention was made to have provided the disk player, as taught by Shindo, with guide pins. The rationale is as follows: It would have been desirable to have provided means for securing the disks in their respective holders. As the utilization of guide pins for securing disks is of old and notorious use in the art. One of ordinary skill in the art would have been motivated to have provided the guide pins in the disk player as taught by Shindo, thereby providing secure means for containing the disks within their respective compartments.

Official notice is taken regarding claim 19, with regards to having an overall depth of the apparatus is less than or equal to approximately 1.5 times the information disk diameter. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have constructed the disk player, as taught by Shindo, in a size readily marketable. The rationale is as follows: It would have been desirable to have constructed a disk player that was relatively small for easy storage, etc. As constructing disk players to be small is well known in the art. One of ordinary skill in the art would have been motivated to have constructed the disk player as taught by Shindo, to have an overall depth of the apparatus less than or equal to approximately 1.5 times the information disk diameter thereby having provided a small sized disk player.

Response to Arguments

6. Applicant's arguments filed 1/24/2002 have been fully considered but they are not persuasive.

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On page 7, Applicant argues that Shinto clearly does not show that the reproduction position is between the access position and loading position. The Examiner agrees that this is most accurate view of the arrangement in Shinto, however that this is taken as true does not obviate the 103 rejection based upon Shinto. The 103 rejection assumed that Shinto does not disclose having the reproduction position between the access position and loading position. However, Applicant argues that "the proposed modification of Shinto cannot be obvious because the modification would defeat the purpose of the citation." The Examiner disagrees, noting that the modification of the system to have the reproduction position between the loading position and the access position would not require any major alteration at all, nor defeat the intention of the Shinto. The system of Shinto already permits movement of the disk transport mechanism in both the clockwise and counter-clockwise position. Having the transport able to complete the semi-circle would have been an obvious re-arrangement of the current system, merely requiring the transport to move in the clockwise direction from the reproduction position to the access position, instead of having it move from the reproduction position to the loading position to the access position as now disclosed. As it stands now Shinto discloses all of the components along the same transport arc, rearrangement of the positions along that arc is obvious modification to the system resulting in no unforeseen consequences. Such a modification of the respective positions would have been obvious to one of ordinary skill in the art. Indeed in this situation, no drastic modification is required, one would simply permit the transport mechanism to move clockwise from the reproduction position.

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On page 8, Applicant states that “Shinto does not suggest that “the playing postion is disposed on the loading path.” In Shinto figure 4, the CD PLAY postion is clearly above the CD open positon, which is the end of the path between the loading positon and the playing postion.” The Examiner disagrees, noting that the play positon encompasses the reproduction unit which is element 17. This element is located along the path, and is indeed disposed on the loading path.

On page 8, Applicant argues aspects of claim 5, (Examiner believes that the Applicant means claim 6). Examiner argues that there is no “first guide includes a groove” the examiner points to the arc portion of element 12 that holds the disc as being a groove that engages the disk, and for “rotationally drivable first transport wheel” the examiner points to element 30.

On page 9, Applicant argues aspects of claim 7-8 for much of the same reasons as claims 1 and 6 were argued previously.

On page 10, Applicant states that “with regard to claim 10, the combination of citations does not suggest “the base plate and the laser mouting plate are coupled by means of dampers” as in claim 10.” The Examiner disagrees noting that the reason for the combination is provided for in the rejection *supra*, and furthermore that such things as dampers are standard features on disk players.

Applicant argues against the rejection of claims 13-18 for the same reasons as the argument against claim 1 was argued against, which are addressed *supra*.

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Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tod Kupstas whose telephone number is (703) 305-2655.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess, can be reached at (703) 305-4792. The fax phone number for this art unit is (703) 308-7201. Any inquiry of a general nature or relating to the status of this

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application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 305-3900.

Tod Kupstas


April 1, 2002


Dung C. Dinh
Primary Examiner